Common Errors of Reasoning in Child Protection Work

Eileen Munro

Introduction

Child abuse and neglect have been recognized, in the past century, as major social problems. The public have become concerned about protecting children at risk. Their concern has been intensified by tragic and highly publicized deaths of children at the hands of their parents. In Britain, these have led to a series of public inquiries into how professionals dealt with each case. Inquiries have also been held into cases of suspected child sexual abuse where it seemed that professionals were removing children too readily and causing serious trauma to families (Department of Health, 1988; Scottish Office, 1992).

Complete accuracy is an unreal expectation but in some of these cases, it appeared that on the evidence available, professionals drew the wrong conclusions and that the subsequent tragedies and distress could have been averted. For instance, the inquiry into the death of Jasmine Beckford while under the supervision of the Social Services Department concluded that her death was: "both a predictable and preventible homicide" (London Borough of Brent, 1985, p. 287). The Carlile inquiry reached a similar judgement: "we conclude that Kimberley Carlile's death was avoidable through the intervention of welfare agencies" (London Borough of Greenwich, 1987, p. 216).

It soon became apparent that the inquiries were producing similar criticisms of the services provided to the child and family. Reviews of a number of reports sought to identify the recurrent mistakes (Department of Health and Social Security, 1982; Department of Health, 1991a). But it is proving difficult to improve practice substantially. Dingwall (1986, p. 489) comments on the repetitive character of the findings of inquiries, suggesting that: "these inquiries are actually failing to make any lasting impact on the everyday practice of the occupations and organizations under scrutiny." In its second review of inquiries, the Department of Health (1991a, p. 109) notes that there is still no systematic monitoring to establish whether workers are learning from mistakes but that tragedies are still occurring and there is no evidence of improvement. Children continue to die and public inquiries continue to be held at the rate of one or two a year.

This research project started from the premise that we would be better able to devise guidelines to improve practice if we understand not only which mistakes keep recurring but why they do so. Time and resources are obvious constraints on practice but the focus of this study was on the reasoning processes of the professionals involved. The project involved a content analysis of inquiry reports over a 20-year period, in a framework derived from psychological research on human reasoning.

Human Reasoning

In the centuries-old study of reasoning, two major forms have been commonly identified: analytic and intuitive. Analytic reasoning is characterized as "a step-by-step, conscious, logically defensible process" (Hammond, 1996, p. 60). Intuitive reasoning typically means the opposite: "a cognitive process that somehow produces an answer, solution or idea without the use of a conscious, logically defensible, step-by-step process" (Hammond, 1996, p. 60).

They are often presented as rival forms of thought with people taking a partisan view of their respective merits. Analytic reasoning has the advantage of being clear and explicit about how it reaches a conclusion. It is identified with logic, mathematics and rigorous thought that can be defended by reference to reliable, public standards of ascertainable truth. Intuition, on the other hand, is associated with creativity, imagination and imagery but its critics accuse it of being irrational and obscurantist, producing ideas without clear justification. Critics of analytic thinking, however, argue that too much is claimed for it; in complex situations, there will always be too many unknown variables to disturb the picture and to falsify the precise predictions of analytic reasoning based only on the known variables. The strengths of intuition are displayed in situations needing a rapid digest of numerous factors, such as in human interactions. In the caring professions, there has always been controversy about which form of reasoning is most appropriate. In social work debates about the nature

of social work knowledge and skill, those advocating a scientific approach exemplify the analytic tradition while their opponents have argued that practice must rest on intuitive and empathic understanding of our fellow humans (see Chapter Three, Munro, 1998). Medicine has featured a comparable dispute. In recent years, those arguing for an analytic, scientific approach have been dominant but they have been challenged by those claiming that the doctor-patient relationship, based on intuitive understanding, is a crucial element of healing.

In the often-heated arguments between analytic and intuitive thinkers, the two approaches tend to be presented as rivals. Hammond (1996), however, offers the far more constructive idea that these two dimensions of human cognitive capacity should be seen as existing on a continuum, not as a dichotomy. He argues that questions about which is better can only be answered relative to a particular context and task. In science, for example, philosophers have made the distinction between the context of formulating a theory and of testing it (e.g., Kuhn, 1970). The former is seen to be an intuitive move, going beyond the mechanics of data collection to create hypotheses containing novel concepts or novel relationships between concepts. These products of intuition, however, then need to be corroborated by using deductive logic to derive predictions whose truth or falsity can be ascertained by experiments.

In child protection work, the two forms of reasoning are easily discernible. In practice, many professionals, especially social workers, rely heavily on intuitive skills (Farmer & Owen, 1995; Thorpe, 1994; Parsloe & Stevenson, 1978). Efforts to improve practice tend to take an analytic form, that is, the development of risk assessment instruments, checklists and guidelines.

There is a large body of psychological research that demonstrates the defects of intuitive skills. Kleinmuntz and Schkade (1993), reviewing the findings, conclude: "two decades of research have emphasized the shortcomings of human judgement and decision-making processes." Hammond comments that: No one can read through the literature of social psychology from the 1960s through the 1980s without drawing the conclusion that intuition is a hazard, a process not to be trusted, not only because it is inherently flawed by 'biases' but because the person who resorts to it is innocently and sometimes arrogantly overconfident when employing it. (Hammond, 1996, p. 88).

In making everyday judgements, people take mental shortcuts. If they were perfectly rational, they would carefully consider all the relevant evidence before reaching a conclusion, as professionals are urged to do in practice guidelines for child protection work. But this creates a cost/benefit problem. It has the benefit of leading to the conclusion most likely to be correct on available knowledge but it is expensive in time and effort. People generally prefer to find ways of simplifying reasoning by taking shortcuts, risking a higher level of error. Research in psychology has shown that people are not, on the whole, rational thinkers who have occasional lapses. Instead, they tend to prefer imperfect but easier ways of reasoning. They create rules that reduce difficult judgmental tasks to simpler ones by restricting the amount of information they consider. These rules are good enough in many everyday circumstances but, in some circumstances, they lead to: "large and persistent biases with serious implications for decision-making" (Kahneman, Slovic, & Tversky, 1990, p. 464).

This study examined the hypothesis that many of the recurrent mistakes contributing to tragic outcomes are due to the bias introduced by using everyday habits of reasoning in assessing and reviewing cases.

Methodology

The study examined all available child abuse inquiry reports published in Britain between 1973 and 1994 – a total of 45 reports (listed in Appendix A). One other report (Humberside Child Protection Committee, 1990) was excluded because only the conclusions were made public and these contained insufficient detail for any analysis of the professionals' practice.

A content analysis of the reports was carried out in which the inquiries' criticisms of professional practice were identified and categorized according to the type of error noted. A record was also made of the professionals involved. A qualitative software programme (Nudist) was used to facilitate data manipulation in terms of counting the frequency of each type of criticism and analyzing the contexts in which they occurred. One limitation of the analysis was that the documents were not prepared specifically for this research project. They share a common goal of trying to explain why the tragedy occurred but they vary in size from small pamphlets to substantial books. They, therefore, vary greatly in the amount of detail they include and in their coverage of the issues of interest to this research project. This affects the precision of the analysis. A report may not, for

example, criticize the range of evidence considered by professionals but this, on its own, does not imply that it was adequate in that case. It may be that, in a brief report, this was not considered important enough to be mentioned. Also, when issues were examined in detail – for instance, professionals' responses to warnings from neighbours that a child is being abused – only the larger reports gave a sufficiently detailed account of what was done.

The practice of social workers received most attention in the inquiries because of their central role in child protection but the contributions of other professionals were covered to varying degrees as many of the key decisions were multiprofessional.

Findings

Findings relating to professionals' ability to revise their judgements are presented before looking at factors that affect the range and reliability of the information they use in making their risk assessments.

Failure to Revise Risk Assessments

Although their primary purpose was not to allocate blame, the inquiries made some judgement of whether they considered professional practice to merit criticism. Media coverage has always highlighted reports that found fault with professionals but, in this review, a slightly different picture of practice emerged. Twenty-five percent of the reports were not critical of anyone; the deaths were considered unpredictable given the contemporary level of knowledge about child abuse. Many of these reports applauded the quality of practice. Social workers, who often bear the brunt of critical press reporting, were exonerated or, indeed, praised in 42% of the reports.

The most striking and persistent criticism was that professionals were slow to revise their judgements. The current risk assessment of a family had a major influence on responses to new evidence. If their initial assessment was, in fact, accurate, they demonstrated adequate to good practice. For example, in one case (Cheshire Central Review Committee, 1982), social workers assessed the baby as at high risk but the court rejected their application for a care order and so he was returned to his parents. Social workers then displayed a high standard of practice in monitoring the family but were unable to obtain sufficient evidence to return to court before, sadly, the baby was killed. In cases where the assessment was inaccurate, however, professionals were criticized when there was counter evidence available that the inquiries deemed they should have collected and taken note of. In Jasmine Beckford's case, for instance (London Borough of Brent, 1985), social workers monitoring Jasmine after she had been returned to her abusive parents accepted the parents' claim that all was well and made no attempt to check this by, for example, seeing Jasmine herself (she lost weight steadily after returning home) or contacting her school (her attendance, contrary to her parents' claims, was erratic).

The significance of failure to revise risk assessments became particularly apparent when cases were grouped according to the stage at which professionals were involved when the tragedy occurred. In 14 cases, there had been investigation of an allegation of abuse but it was judged to be either unsubstantiated or low risk. In 12 cases, a similar investigation led to the assessment that there was moderate to high risk but insufficient grounds for removing the child and the family were being monitored. Children who had been abused, removed from their parents and then returned home to them made up a further 13 cases. Four families were known to social workers as adoptive or foster parents. The remaining two cases were the Cleveland and Orkney reports where large numbers of children had been removed from their homes because of suspected sexual abuse.

Table 1 correlates the level of professional involvement with whether or not the report was critical.

In the 14 cases where allegations of risk or actual abuse had been investigated leading to an assessment of no or low risk, criticisms were not directed at the initial assessment but at the failure to check it more widely or to reappraise it when new evidence arose. In all the cases, there were repeated allegations but later ones were poorly investigated. Leanne White's social worker, for example, investigated the first allegations of abuse and decided there were no grounds for concern. When she received allegations from two other sets of neighbours, she did not reconsider her judgement but ignored the referrals (Nottinghamshire Area Child Protection Committee, 1994).

The second group, of cases assessed as moderate to high risk and being monitored, contains the majority of the noncritical reports. Of the four critical reports, it was thought that the assessments of risk should have been higher on the evidence available at the time. Two early reports blamed the failure on poor interprofessional communication while the two more recent ones blamed it on poor assessment of the shared information.

(Continued on page 20)

Table 1. Injury Judgement by Level of Involvement

Level of Involvement	Number Critical of	Not Critical Professionals	Total
Judged No/Low Risk	14	0	14
Significant Risk and Monitoring (one divided report)	4	7	12
Returned Home	11	2	13
Foster/Adoptive Families	1	3	4

Nearly all the cases where the children were returned home were critical. Professionals were, as one would expect, generally optimistic about the parents' improvement but were criticized for a poor standard of monitoring or inadequate investigations of new allegations of concern. However, in two cases, the courts had sent the children home against the social workers' recommendation. In these reports, only the court decisions were criticized; the quality of social work monitoring was praised. In the two cases that were not criticized, professionals were judged to have made competent assessments and it is only with hindsight that we know the family was high risk.

The fourth set of cases involved assessments of families as foster or adoptive placements where no specific allegations of abuse were made. The social work assessment was criticized in one case as poor and overlooking causes for concern that should have been identified. In the remaining three cases, however, it was considered that the risk could not have been seen.

The final category, involving the large scale removal of children, is very different from the rest of the sample in that no child died and it is not clear, even with hindsight, how many were actually the victims of sexual abuse. However, these two reports were included because they illustrate how professionals can be criticized for overestimating as well as under-estimating risk. In relation to revising risk assessments, both reports were extremely critical of professionals' overconfidence in their initial assessments and their failure to review them critically.

Incidents That Triggered Revision of Risk Assessments

Inquiries report that practitioners did, of course, change their minds at times and, in the thirty-one cases where this happened at some point in the history of professional involvement, the incidents that led them to revise their assessment of risk substantially were analyzed. A case may figure in more than one category but is only counted once within each category. The findings are shown in Table 2.

Injuries were clearly the major factor in reassessing a family. But, on the whole, only serious injuries reported by professionals had this effect. In 58% of cases, doctors reported the injuries and said they believed they were due to abuse. In 22% of incidents, the injuries were seen by the social workers themselves. Nursery staff raised the alarm effectively in three cases. In contrast, neighbours and relatives made numerous reports of injuries but these had little effect on altering professionals' judgements. The

Table 2. Revision of Risk Assessment

Incident	Frequency
Injuries Seen on Child	26
Pregnancy in Known Problem Family	5
Child Not Seen for a Time	3
Neighbours Reported Child Crying And Parents Refused Access	1

differential power of professionals and the public is also evidenced in their ability to trigger what the inquiries judged to be a good investigation of their allegation of abuse. Ten of the 14 cases where risk was not seen involved referrals from members of the public. In the 12 cases where investigation of an allegation of abuse led to the assessment that there was a significant risk but insufficient to remove the children, all the referrals came from professionals.

Given the persistence of the current risk assessment, it is valuable to consider what biases contribute to inaccurate assessments and how people can fail to see evidence that challenges their judgement.

Available Evidence

Since the inquiries deal only with tragic outcomes, it is known, with hindsight, that the identification of abuse and assessment of risk was inaccurate. A recurrent criticism is that the inaccuracy is due to basing judgments on too little information about the family. Inquiries argue that it is not only with hindsight that the judgment can be faulted but the error could have been rectified if professionals had checked their views against a wider range of evidence. Sometimes, doctors can diagnose abuse confidently from the nature of the injuries but, in most cases, recognition and risk assessment involves collating the various details known to a number of different people. Each agency's knowledge may seem only slightly worrying when seen in isolation but, once pooled with other agencies' information, the risk assessment may alter radically.

So, for instance, the general practitioner knew that Stephen Meurs' mother was seriously depressed, the health visitor knew that she was not being allowed to see Stephen when she visited but the other children looked alright, and the social worker knew that the grandfather and a neighbour had complained that Stephen's care was inadequate. Unfortunately this information was not collated until after Stephen's death from malnutrition (Norfolk County Council, 1975). In examining the range of evidence used, it is useful to distinguish between information that is technically available and that which was actually used by the professionals.

Technically Available Information

One reason for not using the full range of evidence may be that it is technically difficult to obtain. Issues of civil liberties, as well as resource constraints, place some limits on how thorough and intrusive professionals can be. Some constraints, however, can be due to the systems of communication. This was highlighted by early inquiries which attributed the failure to collate information to procedural defects – to the absence of formal means of sharing knowledge between professionals. Twelve reports came to the conclusion that if all the professionals' knowledge had been shared, the risk to the child might have been more accurately assessed. These reports occur predominantly before 1979 and the subsequent reduction in such criticisms may be a sign of the success of their recommendations. Clear procedures for collaboration and communication have been introduced (Department of Health, 1991b). Training has emphasized the importance of using a wide range of evidence in making assessments and the fallibility of judgements made on the basis of seeing a family in only one context, such as a medical surgery.

Psychologically Available Evidence

While the number of criticisms of interprofessional communication has dropped, there has been no equivalent drop in criticisms of assessments being based on too narrow a range of evidence. Information has not only to be shared but to be used. The major omissions in using evidence that was available are listed below.

Past information was overlooked in several cases. Inquiries paint a picture of professionals becoming absorbed in present-day issues and failing to stand back and place current issues in the long-term history of the family. Sixteen reports (36%) criticize the failure to use past history in assessing current functioning. Ten reports (22%) highlight professionals' failure to take a longer-term perspective and notice an emerging pattern of increasing risk.

While much evidence from the past was overlooked, professionals' first impression of a family had enduring impact. In 14 reports, the families were never assessed as dangerous despite repeated allegations of abuse. In 11 of these, the inquiries criticized the social workers, not for their initial assessments, but for their failure to review them adequately when given new information.

Written information was less likely to be noticed than verbal. In eight cases, social workers failed to look at their own files and so overlooked items of major significance such as previous abuse or, in one memorable case, the fact that the child was on the Child Protection register. At case conferences, significant evidence in written material was repeatedly overlooked in preference for the direct reports of those

present. In the case of Stephanie Fox, those present concluded that there was no evidence of nonaccidental injury although they had read the pediatrician's report stating that some of Stephanie's injuries were not accidental (Wandsworth Area Child Protection Committee, 1989). Research on child abuse was very under-used. Twenty-five reports (55%) criticize practitioners for failing to recognize the significance of known risk factors.

Table 3 summarizes the findings on criticisms of the use of evidence.

Unreliable Evidence

Another way in which professionals failed to revise their judgements was in their differential levels of scepticism about new evidence. Child protection is an area where there is considerable scope for error and dishonesty and where a critical attitude to all evidence is needed. Professionals showed an ability to be skeptical about information when it conflicted with their view of the family but were repeatedly criticized for being uncritical when the new evidence supported their view.

Child protection workers often rely on people's testimony rather than written records for information. They ask parents the cause of their child's injuries.

Table 3. Errors of Reasoning

Criticism	Frequency
Not Using Evidence from Past History	26
Not Using Research on Risk Factors	25(55%)
Not Using Written Evidence (Files, Reports)	16
Known to Others but not Collated	12

They ask neighbours to describe the abusive behaviour they claim to have seen. Seniors ask field workers to report on the progress of a case. The problem is that there are many reasons why people lie or distort the facts when talking to a social worker. Parents who are actually harming their child have powerful motives for concealing this. Children who are being abused can be scared to say so. Neighbours and relatives can be malicious and exaggerate or falsify what has happened in order to get the parents into trouble. Even when not being deliberately dishonest, people tend to be biased in judging what seems significant and worth reporting. Neighbors who dislike a family find it easier to think of examples of their faults than their virtues.

Inquiry reports show the lengths abusive parents will go to hide the truth and how successful they can be. Jasmine Beckford's parents went to considerable efforts to stage-manage the social worker's visit to hide the fact that Jasmine could not stand properly because she had a broken leg (London Borough of Brent, 1985). Each time Sukina was injured, her parents waited for the bruising to fade before taking her for medical treatment so that the fractured bones would not look so obviously due to being beaten up. They also went to different hospitals to conceal the frequency of her injuries (Bridge Child Care Consultancy, 1991). When Charlene Salt had broken ribs, her parents told social workers they were going on holiday and then hid from sight until the injuries were undetectable (Oldham District Review Committee, 1986).

Many reports criticize social workers for failing to talk to the children concerned and to get their account of what was happening. However, if we examine the 10 cases where social workers' communications with children are discussed, it seems that children's testimony is accepted when it corroborates the social worker's assessment and doubted when it challenges it. In seven cases, the children denied being abused or agreed with their parents' claims that their injuries were due to accidents. In six of these, the inquiries decided, with hindsight, that the children had been lying; in the other case they were uncertain. In every case, social workers believed what the children said. In the three cases where children said they were being abused, they were not believed though hindsight shows that they were being truthful.

These sources of unreliable information are all, to some extent, familiar to professionals and there are many instances, in the reports, where scepticism was shown and practitioners displayed a good critical attitude to evidence. However, their critical faculties tended to be triggered into action only when the new data conflicted with their existing appraisal of the family. The children who told of abuse and were not believed all offered information that challenged the current view of the family.

Errors in Communication

The final source of error seems more random but its prevalence suggests it is a significant source of inaccuracy. Forty percent of the inquiries reported an error in communication that had serious repercussions on the case because it was not detected. For example, Heidi Koseda (London Borough of Hillingdon, 1986) and Stephen Meurs (Norfolk County Council, 1975) both died of starvation but, in each case, social workers' concern about them had been allayed by mistakenly believing they had been seen alive and well by a health visitor. The health visitor had indeed called at the home but had seen only the siblings. Accurate information might have led to more urgent efforts to see the children and their poor state of health would have been immediately obvious. The case of Darryn Clarke illustrates how, as information moves through a chain of people, small individual distortions finally produce a grossly inaccurate message. His relatives went to the police to report their concern that this little boy might be at risk of physical injury from his mother's boyfriend and they were unable to find either the child or his mother. The duty senior social worker, at the end of a long chain of communication, heard that a little girl, living with her mother at a specified address, was in danger of neglect. He visited and, like the relatives, found no-one at home, but, since the case did not sound urgent, he took no further action until the relatives again raised the alarm (Department of Health and Social Security, 1979). Errors in communication have been reported in other studies of practice (Vernon & Fruin, 1986) and are probably inevitable. People sometimes hear each other incorrectly; they make mistakes when writing up their records; they may express themselves in vague terms that leave scope for misinterpretation by others. But the scale of fallibility-with significant errors being reported in 40% of the inquiries-suggests that professionals need to bear in mind constantly the need to check information and to remember that "facts" can be inaccurate.

A nonjudgmental acceptance that errors are an inevitable feature of practice might make it easier for people to point out any mistakes they spot. Corby's study of parental participation in case conferences reported that 31% of parents said that factually inaccurate statements had been made about them at conferences but they had felt unable to challenge them (Corby, Millar, & Young, 1996). Corby suggests that parents may believe they are more likely to keep their children if they look compliant and correcting information might be interpreted as being difficult.

Discussion

Inquiries are a biased sample of practice since they focus on cases with a tragic outcome. However, there are good grounds for considering them to be representative. Professionals who have read them have generally accepted them as typical and capable of offering lessons for others. No strong efforts have been made to dismiss them as examples of unusually poor practice. Also, there are other empirical studies of practice that corroborate the picture of practice portrayed in the reports (e.g., Corby, 1996; Social Services Inspectorate, 1993).

Farmer and Owen's study (1995) supports the findings on professionals' slowness in revising risk assessments. In a study of 120 case conferences, they found that the initial assessment and pattern of case management were not critically re-appraised but "usually endorsed at subsequent reviews, even when it was deficient" (Farmer & Owen, 1995, p. 258). They cite, as illustration, the different reactions to new suspicions of sexual abuse. In the case of David, where there was already significant concern: "…there was an escalation of concern at the [review] conference that was out of proportion to the risks involved" (1995, p. 254). In Jenny's case, where the abused child had been placed in the supposed safety of a foster placement, her new allegations of being abused by her brother led to no action to separate them or protect the girl. Farmer and Owen (1995) comment: “The escalation in the case of David did seem to relate to a process in which the suspicions of the initial conference were apparently being confirmed, whereas inattention to Jenny's alleged abuse occurred because it failed to fit the preconceptions formed at the first conference“. (p. 254)

This study also supports the findings on what evidence is used. At case conferences, a focus on the present was apparent. Current information gained from the police and social work investigation dominated the conferences (Farmer & Owen, 1995, p. 141). The emphasis was not on past history but on giving detailed verbal accounts of what had happened at this stage, what family members had said and how they reacted to the investigation. Parents' reactions to professionals during the investigation were taken as representative of the quality of parenting normally available to the child, without checking whether they were typical or not.

The findings of the analysis of inquiry reports accord

with psychological research on human reasoning. Professionals in child protection are not unusual in holding onto views despite contrary evidence. People in general are slow to alter their views: “It appears that beliefs-from relatively narrow personal impressions to broader social theories-are remarkably resilient in the face of empirical challenges that seem logically devastating“. (Kahneman et al., 1990, p. 144)

The findings on the type of information that was under-used are also what would be expected from psychology research. People resort to taking shortcuts because of the sheer volume of relevant material. The psychologist Kahneman describes the social world as "often overwhelmingly informative" (Kahneman et al., 1990). And professionals with heavy caseloads and limited time can easily feel overwhelmed by the range of potentially important details to consider when assessing a family. They tend, therefore, to be selective in the information they use but the way they select is biased. They tend to use the facts that come most readily to mind. The way memory works means that these are not necessarily the most relevant. Facts are memorable if they are vivid, concrete, arouse emotion and are either the first or most recent. This fits the findings of this study: the dull, abstract material in research studies, case records, letters and reports was overlooked while the vivid, current information from interviews was remembered. First impressions have enduring effect because they influence the way any new information is interpreted (Munro, 1995). Hence the social worker who has formed a good opinion of a family is more likely to treat any new allegation of abuse with scepticism. In general though, recent events come to mind more readily than past ones and this is illustrated in the way professionals become absorbed in present day issues and fail to stand back and place current events into a longer term assessment of the family. This bias can be very powerful in preserving the current risk assessment by obscuring the pattern of behaviour or the frequency with which small worrying incidents are happening.

These findings suggest that one way of improving child protection practice is to devise strategies that offset the biases and errors to which human reasoning **is** vulnerable. In terms of Hammond's (1996) framework of an analytic/intuitive continuum, analytic tools are needed to supplement intuitive skills and shift practice reasoning along the continuum towards the analytic end. Intuitive understanding often carries with it a strong psychological sense of feeling right so that people tend to be overconfident about their judgements (Kahneman et al., 1990, Part IV).

Because of its fallibility, however, adapting Hammond's example of science, intuitive judgements should be treated as hypotheses that are then tested in a more rigorous and systematic way. It is unrealistic to suppose that we could eliminate the intuitive element. Risk assessment instruments, for example, can be invaluable aids but they cannot provide a satisfactory replacement for professional judgement. The statistical problems of predicting rare events combined with the limited knowledge of predictive factors for abuse mean that any instrument, used in an actuarial manner, will produce an unacceptably high level of inaccuracy. Browne estimated that, on existing knowledge of risk factors, if we screen 10,000 children in the general population, we would miss seven high risk cases, correctly identify 33 and falsely identify another 1,195 families as high risk (Browne & Saqi, 1988). Although the incidence of abuse is much higher among the families known to the protective services, a high level of accuracy is still hard to achieve. Professionals also face the difficult task of deciding not just whether abuse is probable but whether it is likely to be of a severe enough nature to warrant removal of the child. Current risk instruments do not help predict severity (Wald & Woolverton, 1990, p. 487).

If it is accepted that intuitive skills have a crucial role, it is important that aids to reasoning should be constructed so that they mesh with intuition and act as a supplementary check rather than be presented as rivals, offering an unconnected alternative to intuitive reasoning.

Memory is a key factor in producing bias in the evidence used in making judgements. Strategies are needed to compensate for the way some data are far more easily retrieved than others. Vivid details, data that are concrete, easily imagined, emotionally charged and recent, spring to mind more readily than the by-gone, pallid, abstract, or statistical. In terms of child protection work, this means past history, written records, abstract theory and research findings tend to be under-used compared with the current, often emotionally charged, factual information gained in interviews. Current strategies to help practitioners generally involve checklists and guidelines that give equal emphasis to all areas of information. These could be modified to highlight the areas we know are likely to be overlooked as the ones to which most deliberate attention should be paid.

Good records are essential in enabling access to the necessary data about the family's past history-their parenting record, emerging patterns of conduct or significant changes in behaviour. Memory, besides its

standard limitations of capacity, is vulnerable to "hindsight error" or, as Plous (1993, p. 35) terms it: "the I-knew-it-all-along" effect. This is "the tendency to view what has happened as relatively inevitable and obvious-without realizing that retrospective knowledge of the outcome is influencing one's judgements" (Plous, 1993, p. 35).

Besides increasing the range of evidence used, another fundamental problem to solve is increasing practitioners' ability to change their minds. One strategy for professionals, proposed by psychologists, is to imagine that they are taking the opposing point of view and to think of reasons why their judgement might be wrong. Koriat, Lichtenstein, and Fischoff (1980) undertook a psychological study aimed at helping people reduce their overconfidence in their first judgements and reported this was the most effective strategy. Its success, they suggest, may lie in the way it makes people address their memory in a different way. It does not just ask them to examine the strength of the case for their belief. It entails looking for information to support the opposing view rather than to challenge their existing belief, and so harnesses the general tendency to find it easier to think of information that fits a belief than of facts that refute it. The worker who feels the family are pleasant and nonabusive, for example, should consider how he or she could present a case for the view that the children are at risk. What sources of evidence might be worth pursuing? Can any of the existing information be given an alternative interpretation? How reliable is the evidence that appears to show the family in a good light? The crucial element in strategies to counteract bias is that they involve considering alternative perspectives (Plous, 1993, p. 256).

Reviewing judgements critically is a hard task not only intellectually but also emotionally. Practitioners develop close relationships with their clients. The judgements and decisions in child protection work have major repercussions on the lives of those involved. Entertaining the idea that they are seriously misled in their opinions is stressful. Being critical of one's judgements raises the possibility that the current decisions are wrong-a child is, perhaps, being left in a dangerous setting or a family is being broken up unnecessarily. This leads to the question of what is the best forum in which to review practice.

At present, the multiprofessional case conference or case review is where most appraisal occurs. But evidence from psychology and from studies on the workings of these conferences agree in finding these to be problematic settings in which to expect constructive criticism to be carried out. Groups tend to conformity. Janis proposed the concept of "groupthink" to explain the tendency of groups to avoid dissension: "members'" striving for unanimity overrides their motivation to realistically appraise alternative courses of action (Janis, 1982). Birchall and Hallett (1995) report wide intra- and inter-professional differences in assessing vignettes on child abuse yet despite this, conferences display a high level of consensus (Farmer & Owen, 1995). Corby's (1987) study found: "it was rare to observe open conflict at case conferences and most decisions were reached with apparent consensus" (Corby, 1987, p. 68).

Case conferences have important functions in the exchange of information and as a source of strength and security for professionals (Hallett & Birchall, 1992) but it may be unrealistic to expect them to provide the setting for critical review. It may be that one-to-one professional supervision is a better context in which to expect a systematic and critical review of a case. This can offer a safe, supportive environment in which it is clearly understood that making mistakes is an inevitable feature of working in such a complex area (Munro, 1996). Changing your mind should be seen as a sign of good practice and of strength not weakness.

Conclusion

Assessing risk and identifying child abuse and neglect are difficult tasks. Errors of any kind have harsh consequences for children and their parents, whether a child is left in a dangerous home or families are split up unnecessarily. Some mistakes are inevitable because they are due to our limited knowledge. Others, arising from errors in human reasoning, are avoidable. This analysis of inquiry reports indicates that these errors are not random but predictable on the basis of research in psychology about how people simplify the reasoning processes in making complex judgements.

Errors can be reduced if people are aware of them and strive consciously to avoid them. The challenge is to devise aids to reasoning that recognize the central role of intuition and do not seek to ignore or parallel it but, using our understanding of its known weaknesses, offer ways of testing and augmenting it.

One weakness of intuitive reasoning is that it tends to be biased in the information it draws on. It tends to be

biased towards that which is vivid, concrete, emotive and either the first or most recent. Good records and checklists are essential to reduce this bias but could be more effective if they highlighted the areas that professionals tend to overlook: the dull, abstract, statistical and old.

The other prominent weakness of human reasoning is a reluctance to change one's mind. Professional judgements should be regarded as valuable but fallible, needing to be treated as hypotheses requiring further testing. This is not an easy step. Sutherland (1992) sums up the research findings on the numerous ways people have of avoiding challenges to their beliefs: "First, people consistently avoid exposing themselves to evidence that might disprove their beliefs. Second, on receiving evidence against their beliefs, they often refuse to believe it. Third, the existence of a belief distorts people's interpretations of new evidence in such a way as to make it consistent with the belief. Fourth, people selectively remember items that are in line with their beliefs". (p. 151)

Given the ingenuity of people's ways of holding on to beliefs, practitioners and their supervisors face a hard task in developing a more critical attitude. However, given the importance of accuracy in child protection work in terms of human suffering, it is a challenge that needs to be faced.

About the author

Eileenn Munro, Department of Social Policy and Administration, London School of Economics, London, England

This article reprinted from Child Abuse and Neglect, Volume 23, No 8, pp 745-758, 1999, Munro, "Common Errors of Reasoning" with permission of Elsevier Science BV.

References

Birchall, E., & Hallett, C. (1995). Working together in child protection. Edinburgh, Scotland: HMSO.

Bridge Child Care Consultancy. (1991). Sukina: An evaluation report of the circumstances leading to her death. London:Bridge Child Care Consultancy.

Browne, K., & Saqi, S. (1988). Early prediction and prevention of child abuse. Chichester, England: Wiley.

Cheshire Central Review Committee for Child Abuse. (1982). The report of an Inquiry Panel into the examination of the implications of the death of a child. Chester, England: Cheshire County Council.

Corby, B. (1987). Working with child abuse. Milton Keynes, England: Open University Press.

Corby, B., Millar, M., & Young, L. (1996). Parental participation in child protection work: Re-thinking the rhetoric. British Journal of Social Work, 26, 475-492.

Department of Health. (1988). Report of the inquiry into child abuse in Cleveland. London: HMSO.

Department of Health. (1991a). Child abuse: A study of inquiry reports, 1980-89. London: HMSO.

Department of Health. (1991b). Working together under the 1989 Children Act. London: HMSO.

Department of Health and Social Security. (1979). The report of the Committee of Inquirv into the actions of the authorities and agencies relating to Darryn James Clarke. London: HMSO.

Department of Health and Social Security. (1982). Child abuse: A study of inquiry reports, 1973-81. London: HMSO.

Dingwall, R. (1986). The Jasmine Beckford affair. The Modern Law Review, 49, 489-507.

Farmer. E., & Owen, M. (1995). Child protection practice: Private risks and public remedies. London: Department of Health.

Hallett, C., & Birchall, E. (1992). Co-ordination and child protection: A review of the literature. Edinburgh, Scotland: HMSO.

Hammond, K. (1996). Human judgement and social policy. Oxford, England: Oxford University Press.

Humberside Child Protection Committee. (1990). A report of a panel of enquiry instituted bv the Humberside Child Protection Committee into the quality of foster care provided by Mr. and Mrs. 'A' for children placed in their care. Hull, England: Humberside Child Protection Committee.

Janis, 1. (1982). Groupthink: Psychological studies of policy decisions and fiascoes. Boston MA: Houghton Mifflin.

Kahneman, D., Slovic, P., & Tversky, A. (1990). Judgements under uncertainty: Heuristics and biases. Cambridge, England: Cambridge University Press.

Kleinmuntz, D., & Schkade, D. (1993). Information displays and decision processes. Psychological Science, 4, 221-229.

Koriat, A., Lichenstein, S., & Fischoff, B. (1980). Reasons for confidence. Journal of Experimental Psychology: Human Learning and Memory, 6, 107-118.

Kuhn, T. (1970). The structure of scientific revolutions. Chicago IL: Chicago University Press.

London Borough of Brent. (1985). A child in trust: The report of the panel of inquiry into the circumstances surrounding the death of Jasmine Beckford. London: London Borough of Brent.

London Borough of Greenwich. (1987) A child in mind: Protection of children in a responsible society. London: London Borough of Greenwich.

London Borough of Hillingdon. (1986). Report of the Review Panel of the London Borough of Hillingdon Area Review Committee on Child Abuse into the death of Heidi Koseda. London: Borough of Hillingdon.

Munro, E. (1996). Avoidable and unavoidable mistakes in child protection work. British Journal of Social Work, 26, 793-808.

Munro, E. (1998). Understanding social work: An empirical approach. London: Athlone Press.
Norfolk County Council. (1975). Report of the Review Body appointed to enquire into the case of Steven Meur.T. 1975. Norwich, England: Norfolk County Council.
Nottinghamshire Area Child Protection Committee. (1994). Report of Overview Group into the circumstances surrounding the death of Leanne White. Nottingham, England: Nottinghamshire County Council.
Oldham District Review Committee. (1986). Review of child abuse procedures. Oldham: England: Oldham Council.
Parsloe, P., & Stevenson, 0. (1978). Social services teams: The practitioner's view. London: HMSO.
Plous, S. (I 993). The psychology of judgement and decision making. Philidelphia,,PA: Temple University Press.
Social Services Inspectorate. (1993). Evaluating child protection services: Findings and issues. London: Department of Health.
Sutherland, S. (1992). Irrationality: The enemy within. London: Constable.
Thorpe, D. (1994). Evaluating child protection. Buckingham. England: Open University Press.
Vernon, J., & Fruin, D. (1986). In care: A study of social work decision making. London: National Children's Bureau.
Wald, M., & Woolverton, M. (1990). Risk assessment: The emperor's new clothes? Child Welfare, LXIX, 483-511.
Wandsworth Area Child Protection Committee. (1989). The report of the Stephanie Fox Practice. Review. London: London Borough of Wandsworth.

Appendix A Child Abuse Inquiry Reports

Area Review Committee, Lambeth, Lewisham and Southwark London Boroughs. (1989). Doreen Aston report. London:, London Borough of Lambeth.
Birmingham City Council. (1976). Joint enquiry arising from the death of Neil Howlett. Birmingham, England: Birmingham City Council.
Birmingham City Council. (1980). Report of the director of social services to the social services committee. Birmingham, England: Birmingham City Council.
Birmingham Social Services Committee. (1985). A report of the panel of members inquiry into the circumstances leading to the death on 23.3.85 of Gemma Hartwell subject of a care order-placed home on trial on 7.3.85. Birmingham, England: Birmingham City Council.
Bradford Area Review Committee. (1981). Child abuse. Bradford, England: Bradford City Council.
Bridge Child Care Consultancy. (1991). Sukina: An evaluation report of the circunutances leading to her death. London: BCCC.
Cambridgeshire County Council and Suffolk County Council. (1978). Report of the committee of enquiry concerning Simon Peacock. Cambridge. England: Cambridgeshire County Council.
Cambridgeshire County Council. (1982). Report by the Social Services Committee on the involvement of the Social Services Department in the events preceding the death of Jason Caesar. Cambridge, England:
Cambridgeshire County Council. Cheshire Central Review Committee for Child Abuse. (1982). The report of an inquiry panel into the examination of the implications of the death of a child. Chester, England: Cheshire County Council.
The County Councils and Area Health Authorities of Berkshire and Hampshire. (1979). Lester Chapman inquiry report. Reading, England: Berkshire County Council.
Department of Health. (1988). Report of the inquiry into child abuse in Cleveland. London: HMSO.
Department of Health and Social Security. (1974). Report of the committee of inquiry into the care and supervision provided in relation to Maria Colwell. London: HMSO.
Department of Health and Social Security. (1975). Report of the committee of inquiry into the provision and co-ordination of services to the family of John George Aukland. London: HMSO.
Department of Health and Social Security. (1978). Report of the Social Work Service of Department of Health and Social Security into certain aspects of the management of the case of Stephen Menhenniot. London: HMSO.
Department of Health and Social Security. (1979). The report of the committee of inquiry into the actions of the authorities and agencies relating to Darryn James Clarke. London: HMSO.
Department of Health and Social Security. (1980). The report of the committee of inquiry into the case of Paul Steven Brown. London: HMSO.
Derbyshire County Council and Area Health Authority. (1978). Karen Spencer report. Derby, England: Derbyshire County Council.
Essex County Council and Essex Area Health Authority. (1974). Report of the joint committee set up to consider co-ordination of services concerned with NAI to children. Colchester, England: Essex County Council.
Reuben Carthy (d.o.b. 7.4.82.). Nottingham, England: Nottinghamshire County Council.
Nottinghamshire Area Child Protection Committee. (1994). Report of overview group into the circumstances surrounding the death of Leanne White. Nottingham, England: Nottinghamshire County Council.
Oldham District Review Committee. (1986). Review of child abuse procedures. Oldham: Oldham Council.
Salop County Council. (1973). Report of the inquiry into the circumstances surrounding the death of Graham Bagnall (d.o.b. 20.5.70) and the role of the county council's social services. Shrewsbury, England: Salop County Council.
Scottish Office. (1992). The report of the inquiry into the removal of children from Orkney in February 1991. Edinburgh, Scotland: HMSO.
Secretary of State for Scotland. (1975). Report of the Committee of Inquiry into the Consideration given and

steps taken towards securing the welfare of Richard Clerk by Perth Town Council and other bodies or persons concerned. Edinburgh, Scotland: HMSO.

Somerset Area Review Committee. (1977). Wayne Brewer: Report of the review panel. Taunton, England: Somerset County Council.

Staffordshire Area Health Authority. (1974). Report of the Committee of Enquiry set up to inquire into the circumstances surrounding the admission, treatment and discharge of baby David Lee Naseby. Stafford, England: Staffordshire Area Health Authority.

Wandsworth Area Child Protection Committee. (1989). The report of the Stephanie Fox practice review. London: London Borough of Wandsworth.